

**Listing of the Claims:**

The following is a complete listing of all the claims in the application, with an indication of the status of each:

- 1        1 (Currently Amended). A surface treatment apparatus comprising:  
2                a sheet heating unit which heats a sheet containing at least a  
3        thermoplastic resin layer, the sheet being selected from a thermosensitive  
4        recording sheet, an inkjet sheet, an electrophotographic sheet, a hot  
5        developing sheet, a silver halide photography sheet, and a silver halide  
6        digital photography sheet; and  
7                a sheet depression and protrusion-forming unit disposed on a  
8        downstream process side of the sheet heating unit which forms depressions  
9        and protrusions on ~~at least one of the thermoplastic resin layer and the~~  
10       ~~image-forming layer.~~
- 1        2 (previously presented). A surface treatment apparatus according to Claim  
2        1, wherein the sheet heating unit heats the sheet at a temperature equal to  
3        or higher than the softening point of a thermoplastic resin in the  
4        thermoplastic resin layer.
- 1        3 (Original). A surface treatment apparatus according to Claim 1, wherein  
2        a thermoplastic resin forming the thermoplastic resin layer is a  
3        polyethylene resin.
- 1        4 (previously presented). A surface treatment apparatus according to Claim  
2        1, wherein the sheet comprises the thermoplastic resin layer and ~~an~~ the  
3        image-forming layer on a base, and  
4                depressions and protrusions are formed on a surface of the  
5        image-forming layer and at an interface of the image-forming layer with  
6        the thermoplastic resin layer by the sheet depression and  
7        protrusion-forming unit.

1       5 (Original). A surface treatment apparatus according to Claim 1, wherein  
2       the sheet depression and protrusion-forming unit forms depressions and  
3       protrusions at a temperature equal to or higher than the softening point of a  
4       thermoplastic resin in the thermoplastic resin layer.

1       6 (Original). A surface treatment apparatus according to Claim 1, wherein  
2       at least one of a depression depth, a protrusion height , and a depression  
3       and protrusion surface density can be adjusted.

1       7 (Original). A surface treatment apparatus according to Claim 6, wherein  
2       the protrusion height is 10 to 100 $\mu$ m, and a depression and protrusion  
3       interval is 10 to 300 $\mu$ m.

1       8 (Original). A surface treatment apparatus according to Claim 1, wherein  
2       at least one of a depression depth, a protrusion height, and a depression  
3       and protrusion surface density can be adjusted according to customer  
4       specifications.

1       9 (Previously presented). A surface treatment apparatus according to Claim  
2       1, wherein the sheet depression and protrusion-forming unit forms  
3       depressions and protrusions of different shapes in different parts of the  
4       sheet according to an image to be formed on the sheet.

1       10 (Previously presented). A surface treatment apparatus according to  
2       Claim 1, wherein the sheet depression and protrusion-forming unit  
3       selectively drives plural wires, and depressions and protrusions are formed  
4       by giving impacts to the sheet surface with the wires each comprising a  
5       depression and protrusion-forming member attached to the end thereof.

1       11 (Previously presented). A surface treatment apparatus according to  
2       Claim 10, wherein the sheet depression and protrusion-forming unit is an  
3       impact printer head.

1 12 (Original). A surface treatment apparatus according to Claim 1, wherein  
2 the sheet depression and protrusion-forming unit is a roller having surface  
3 depressions and protrusions against the sheet.

13 (Canceled).

1 14 (Currently Amended). An image-forming apparatus comprising:  
2 an image-forming unit which forms a visible image on a sheet, and  
3 a surface treatment unit, comprising;  
4 a sheet heating unit which heats the sheet comprising at  
5 least a thermoplastic resin layer, the sheet being selected from a  
6 thermosensitive recording sheet, an inkjet sheet, an  
7 electrophotographic sheet, a hot developing sheet, a silver halide  
8 photography sheet, and a silver halide digital photography sheet,  
9 and  
10 a sheet depression and protrusion-forming unit disposed on  
11 the downstream process side of the sheet heating unit which forms  
12 depressions and protrusions on ~~at least one of the thermoplastic~~  
13 ~~resin layer and the image-forming layer~~, the surface treatment unit  
14 performing surface treatment of the sheet on which an image is  
15 formed by the image-forming unit.

1 15 (Original). An image-forming apparatus according to Claim 14, wherein  
2 the sheet heating unit which heats the sheet at a temperature equal to or  
3 higher than the softening point of a thermoplastic resin in the thermoplastic  
4 resin layer.

1 16 (Previously presented). An image-forming apparatus according to  
2 Claim 14, wherein the sheet comprises the thermoplastic resin layer and  
3 the image-forming layer on a base, and  
4 depressions and protrusions are formed on a surface of the

5 image-forming layer and at an interface of the image-forming layer with  
6 the thermoplastic resin layer by the sheet depression and  
7 protrusion-forming unit.

1 17 (Original). An image-forming apparatus according to Claim 14, wherein  
2 the sheet depression and protrusion-forming unit forms depressions and  
3 protrusions at a temperature equal to or higher than the softening point of a  
4 thermoplastic resin in the thermoplastic resin layer.

1 18 (Previously presented). An image-forming apparatus according to  
2 Claim 14, wherein the sheet depression and protrusion-forming unit forms  
3 depressions and protrusions of different shapes in different parts of the  
4 sheet according to an image to be formed on the sheet.

1 19 (Previously presented). An image-forming apparatus according to  
2 Claim 14, wherein the sheet depression and protrusion-forming unit  
3 selectively drives plural wires, and depressions and protrusions are formed  
4 by giving impacts to the sheet surface with the wires each comprising a  
5 depression and protrusion-forming member attached to the end thereof.

1 20 (Previously presented). An image-forming apparatus according to  
2 Claim 19, wherein the sheet depression and protrusion-forming unit is an  
3 impact printer head.

1 21 (Original). An image-forming apparatus according to Claim 14, wherein  
2 the sheet depression and protrusion-forming unit is a roller having surface  
3 depressions and protrusions against the sheet.

1 22 (Previously presented). An image-forming apparatus according to  
2 Claim 14, further comprising:  
3 a control unit which conducts one of driving and stopping driving  
4 the surface treatment unit so as to control an execution of surface treatment  
5 of the sheet.